

REMARKS-General

5. The newly drafted independent claim 34 incorporates all structural limitations of the originally amended claim 27 and includes further limitations previously brought forth in the disclosure. No new matter has been included. All new claims 34-38 are submitted to be of sufficient clarity and detail to enable a person of average skill in the art to make and use the instant invention, so as to be pursuant to 35 USC 112.

6. With regard to the rejection of record based on prior art, Applicant will advance arguments to illustrate the manner in which the invention defined by the newly introduced claims is patentably distinguishable from the prior art of record. Reconsideration of the present application is requested.

Regarding to Rejections of Claims 27-33 under 35USC102

7. The examiner rejected claims 27-33 under 35USC102 as being anticipated by Hermann et al (US 5,703,764). Pursuant to 35 U.S.C. 102, "a person shall be entitled to a patent unless:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.

8. In view of 35 U.S.C. 102(b), it is apparent that a person shall not be entitled to a patent when his or her invention was patent in this country more than one year prior to the date of the application for patent in the United States.

9. However, the Hermann et al. patent and the instant invention are not the same invention according to the fact that the disclosure of Hermann et al. patent does not read upon the instant invention and the newly amended independent claim 34 of the instant invention does not read upon the Hermann et al. patent too. Apparently, the instant invention, which discloses a green switch-mode power supply IC with standby function, should not be the same invention as the Hermann et al. patent which discloses a switch mode power supply having a standby operation.

10. The applicant respectfully submits that Hermann et al. does not anticipate the instant invention as claimed in the newly drafted claims 34-37 under 35 USC 102(b), due to the following reasons:

(A) Referring to the newly drafted independent claim 34, Hermann et al. generally discloses a switched-mode power supply having standby operation which comprises a transformer, a switching transistor, an integrated circuit, a first and a second rectifier circuit (Hermann et al., Claim 1). It is clear from Hermann et al. that in order to accomplish switching of the power supply, a **single switching transistor** is utilized, wherein the switching transistor is controlled by the integrated circuit for switching the power supply (Hermann et al., Col. 2, Lines 50-54 and Fig. 1). On the other hand, the instant invention claims a green switch-mode power supply with standby function comprising a standby switch-mode power supply which comprises a standby control circuit, a main switched mode power supply which comprises a main control circuit, a supplemental circuit, and a monolithic green switched-mode power supply IC integrated with the standby control circuit and the main control circuit. In other words, there exist two separate circuitries for each of two operations modes of the instant invention. Generally speaking, Hermann's system cannot be incorporated with PC ATX because when the PC ATX is at the standby mode, a set of four outputs, including 12V, 5V, 3.3V and -12V, should be switched off. In other words, the outputs of 12V, 5V, 3.3V and -12V are 0V at the standby mode. The instant invention is adapted to incorporate with the PC ATX because the main switched-mode power supply is subjected to a remote control signal to be on/off.

(B) According to the instant invention, the system of the instant invention contains dual individual power supplies, including the main switched-mode power supply and the standby switched-mode power supply, wherein **the main switched-mode power supply has zero output at the standby mode**. The single power supply of Hermann's system is not equivalent to the dual power supplies of the instant invention. Moreover, since there are two individual power supplies, when the system is in the standby operation, the power required for maintaining at the standby operation can be optimally minimized. Hermann et al. does not anticipate these features.

(C) Referring to the newly drafted claim 35, Hermann et al. does not anticipate that optical coupling is applied in said remote control circuit in addition to what is claimed in the newly amended independent claim 34 as a whole.

(D) Referring to the newly drafted claims 37-38, Hermann et al. fails to anticipate that the IC is further integrated with a PFC error amplifier and a PFC control circuit in addition to what is claimed in the newly amended independent claim 34, and the intervening claims 35 and 36 as a whole.

(E) In addition, the instant invention is environment friendly because the output at the standby mode is relatively minimized. Accordingly, when the power output is more than 10V, the system requires two individual power supplies, i.e. the main switched-mode power supply and the standby switched-mode power supply. Therefore, the standby switched-mode power supply can minimize the power output at the standby mode in a control manner.

11. The examiner also rejected claims 27-33 under 35USC102 as being anticipated by Isono (US 6,297,976). The relevant quotation under 35USC 102 has been given above. The applicant respectfully submits that Isono does not anticipate the instant invention as recited in the newly drafted claims 34-38 under 35 USC 102(b), due to the following reasons:

(F) Isono generally discloses a direct current source circuit comprising a plurality of converters, an output circuit and a common feedback control circuit for controlling a plurality of switches as a function of the composite output voltage. Isono teaches a direct current source circuit in which a load share of each converter is easily set and the construction of the circuit is simplified, wherein the power supply having a plurality of converters coupling in a series connection or parallel connection to enhance the output power for PDP TV. Accordingly, Isono merely teaches the thin, cascade-connected direct current source circuit for the power source of TV is totally different from the system of the instant invention including a standby switched-mode power supply and a main switched-mode power supply subjected to a remote control signal to be on/off, wherein the monolithic green switched-mode power supply IC is activated by the initiating circuit and is power-supplied by the standby switch-mode power supply.

(G) Regarding the newly drafted claim 34, the design of the monolithic green switched-mode power supply IC is the major factor for the green switch-mode power supply, wherein the standby switched-mode power supply contains a single ended mode including forward and flyback converter, wherein the main switched-mode power supply contains a single ended mode or push-pull converter. Therefore, the monolithic IC, having a low voltage manufacturing technology, is adapted to directly activate the power tube of the standby switched-mode power supply and the power tube of the main switched-mode power supply. For example, the manufacturing cost for the monolithic IC is relatively high and the configuration thereof is complicated when the main power supply requires a half bridge or full bridge converter. In other words, the instant invention is adapted to simplify the complicated structure of the TV power source circuit and PC ATX by minimizing the necessary components so as to reduce the manufacturing cost thereof.

(H) Regarding the newly drafted claim 35, Isono fails to anticipate that an optical coupling is applied in the remote control circuit for sending the remote control signal to the main control circuit, wherein when the remote control signal is an "off" signal, the main switched-mode power supply prohibitive circuit forces the main driven circuit to output a low electric level so as to switch off the main switch-mode power supply, and when the remote control signal is an "on" signal, the main pulse adjustable circuit generates a main pulse in responsive to the main error signal, such that main driven circuit is normally operating to switch on the main switch-mode power supply, in addition to what is claimed in the newly drafted independent claim 34 as a whole.

(I) Regarding the newly drafted claim 36, Isono fails to anticipate that the standby control circuit further comprises a standby pulse adjustable circuit and a standby driven circuit, the standby pulse adjustable circuit generating a standby pulse signal in response to a standby error signal, wherein the main control circuit further comprises the main pulse adjustable circuit, the main driven circuit and the main switch-mode power supply prohibitive circuit; wherein the remote control signal is sent to the main switched-mode power supply prohibitive circuit, when the remote control signal is an "off" signal, the main switched-mode power supply prohibitive circuit forces the main driven circuit to output a low electric level so as to switch off the main switch-mode power supply, and when the remote control signal is an "on" signal, the main pulse

adjustable circuit generates a main pulse in responsive to the main error signal, such that main driven circuit is normally operating to switch on the main switch-mode power supply, in addition to what is claimed in the newly drafted independent claim 34 as a whole.

(J) Regarding the newly drafted claim 37-38, Isono fails to anticipate that the IC is further integrated with a PFC error amplifier and a PFC control circuit, wherein the PFC control circuit comprises a PFC pulse adjustable circuit and a PFC driven circuit, in addition to what is claimed in the newly drafted independent claim 34 as a whole.

The Cited but Non-Applied References

12. The cited but not relied upon references have been studied and are greatly appreciated, but are deemed to be less relevant than the relied upon references.

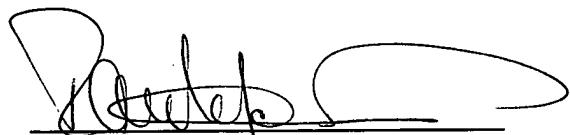
13. In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration and withdrawal of the rejection are requested. Allowance of claims 34-38 at an early date is solicited.

14. A fee in the amount of US\$770 is submitted herewith for petition to revive unintentionally abandoned patent application. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 502111.

15. A fee in the amount of US\$405 is submitted herewith to pay the necessary fee for Request for Continued Examination (RCE). This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 502111.

16. Should the examiner believes that anything further is needed in order to place the application in condition for allowance, he is requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

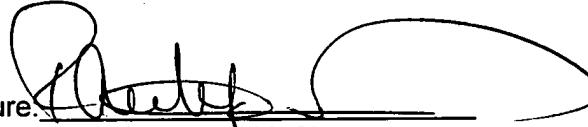


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CERTIFICATE OF MAILING

I hereby certify that this corresponding is being deposited with the United States Postal Service by First Class Mail, with sufficient postage, in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on the date below.

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